09/849,644   MS150906.1

REMARKS

Claims 1-29 are currently pending in the subject application and are presently under consideration. A clean version of all pending claims is found at pages 2-6. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments herein.

I.   **Rejection of Claims 1, 2, 6-10, 13-15, 18-22, and 25-29 Under 35 U.S.C. §102(e)**

Claims 1, 2, 6-10, 13-15, 18-22, and 25-29 stand rejected under 35 U.S.C. §102(e) as being anticipated by Beyda et al. (US 6,148,294). Withdrawal of this rejection is respectfully requested for at least the following reasons. Beyda et al. does not teach or suggest **each and every element** of the claimed invention.

> For a prior art reference to anticipate, 35 U.S.C. §102 requires that "**each and every element** as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950 (Fed. Cir. 1999) (*quoting Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)) (emphasis added).

The subject invention relates to intelligent display and access of likely candidate subdirectories during file save, access, browse, and/or other directory operations. (*See* pg. 3, ln. 15-17). For example, a user can be presented with a candidate tree structure created utilizing probabilistic information and utility upon attempting to open, save, browse, *etc.* In particular, independent claim 1 (and similarly independent claim 27) recites a component which analyzes probabilities and utilities associated with determining potential target directories for storing and accessing data.

Beyda et al. fails to teach or suggest a component which *analyzes probabilities and utilities* as recited in independent claims 1 and 27. The Office Action dated April 6, 2004 contends that "Beyda et al. teaches a user's patterns of access or use (i.e., utilities) by tracking directories and files are accessed most frequently (col. 1, line 66 – col. 2, line 3)." (*See* Office Action dated April 6, 2004, pg. 7). Applicants' representative disagrees with such assertion. In particular, the cited section of Beyda et al. is reproduced herein:

7

> Accordingly, there is provided a computer system having a
> hierarchical directory system which analyzes a user's
> *patterns of access or use*. The system tracks which
> directories and files are *accessed most frequently* by the
> user when in a particular application. When the user
> wishes to access a file, the system presents the user with a
> list of directories or files *in order of most likely use*, based
> on the *frequency tracking*, from the particular application.

(*See* col. 1, ln. 66 – col. 2, ln. 6) (emphasis added). Thus, Beyda *et al.* relates to tracking frequency of access of files or directories by a user. Furthermore, the user is presented with a list of files or directories in order of most likely use based on the frequency tracking. Therefore, Beyda *et al.* presents an ordered list according to *frequency of access*. Additionally, a weighing factor can be considered; however, the weighing factor disclosed in Beyda *et al.* relates to the file type or the date of access. (*See* col. 4, ln. 64 – col. 5, ln. 3). The Office Action contends that "the fact Beyda *et al.* can present to the user the directory or file most likely to be accessed indicated that Beyda utilizes the probability algorithm to calculate the expected probabilities and utilities for the target directories or files." (*See* Office Action dated April 6, 2004, pg. 8). Applicants' representative disagrees with this statement since tracking frequency of access is not the same as analyzing probabilities and utilities. The cited section of Beyda *et al.* does not teach or suggest *analyzing probabilities and utilities* as recited in the subject claims.

On the contrary, the claimed invention *analyzes probabilities and utilities*. In particular, the applicants' claimed invention employs utilities which are based on costs of navigating from candidate nodes in the directory structure to other nodes to find the desired or target information. (*See* pg. 3, ln. 21-28). These navigation costs represent the time and/or effort required by a user to navigate from a recommended node to the actual target. Thus, Beyda *et al.* does not teach or suggest such aspects of the claimed invention.

Furthermore, Beyda *et al.* does not teach or suggest *assigning probabilities and utilities* to a plurality of potential nodes or *determining an expected utility from the probabilities and utilities* associated with the plurality of target nodes as recited in independent claim 13 (and similarly independent claim 26). Probabilities and utilities are

8

assigned to each node and expected utilities are determined based on the *probabilities and utilities*. The expected utility of a potential target node is the probability that the node is the target node weighted by the utility of that node being the target, then summed together with the probabilities that the target location is in some near proximity to the target, weighted by the utility of making a navigational move to an adjacent node from the target and the cost of reviewing a list associated with the navigation. (*See* pg. 10, ln. 11-16). Ideal candidates for display are determined by minimizing the navigation costs.

Beyda *et al.*, on the contrary and as noted *supra*, relates to determining the frequency of access. The user is able to adjust certain parameters of the of the adaptive file directory scheme *via* the time base interface, the duration interface, the file type interface, and the weighing interface. (*See* col. 5, ln. 12 – col. 6, ln. 22). However, these parameters relate to the frequency of use and do not teach or suggest *determining an expected utility from the probabilities and utilities* as recited in independent claims 13 and 26.

Moreover, Beyda *et al.* fails to teach or suggest *displaying a candidate list of likely nodes* as recited in independent claims 13 and 26. The candidate substructures provided to the user are a *reduced subset* of all possible directories in which the user must peruse and traverse during directory operations. (*See* pg. 4, ln. 5-7). Time is saved and efficiency is increased by presenting the user with a reduced subset of likely candidate directories. (*See* pg. 8, ln. 9-12). Beyda *et al.* does not provide a reduced subset of all possible directories. Instead, Beyda *et al.* discloses that the user is provided with a list of directories or files in order of most likely use. (*See* col. 2, ln. 3-6). Beyda *et al.* is silent with regards to providing a user with a reduced subset of all possible directories; thus, Beyda *et al.* does not teach or suggest *displaying a candidate list of likely nodes* as recited in the subject claims.

Furthermore, Beyda *et al.* does not teach or suggest *determining potential target directories* as recited in independent claims 1 (and similarly independent claims 13, 26, and 27). The subject invention provides a list of potential target directories ordered by maximum expected utility regardless of the directory level in which the potential target is located and thus, the amount of navigation required is mitigated. On the other hand,

9

Beyda *et al.* provides a list of subdirectories or files located within a parent directory ordered by frequency of access. Therefore, the *target* directory is not necessarily provided in the ordered list; instead, the target directory may be located within one of the directories in the list. Thus, Beyda *et al.* fails to teach or suggest *determining potential target directories* as recited in the subject claims.

In view of at least the above, it is readily apparent that Beyda *et al.* does not anticipate or suggest the subject invention as recited in claims 1, 13, 26 and 27 (and claims 2, 6-10, 14-15, 18-22, 25, and 28-29 which respectively depend there from). This rejection should be withdrawn.

II.   Rejection of Claims 3-5 and 16-17 Under 35 U.S.C. §103(a)

Claims 3-5 and 16-17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Beyda *et al.* (US 6,148,294) in view of Ishizaki *et al.* (US 5,752,217 B1). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Beyda *et al.* and Ishizaki *et al.*, individually or in combination, do not teach or suggest each and every element set forth in the subject claims.

In particular, Ishizaki *et al.* fails to make up for the aforementioned deficiencies of Beyda *et al.* with respect to independent claims 1 and 13 (which claims 3-5 and 16-17 directly or indirectly depend from). Therefore, the subject invention as recited in claims 3-5 and 16-17 is not obvious over the combination of Beyda *et al.* and Ishizaki *et al.* Accordingly, withdrawal of this rejection is respectfully requested.

III.   Rejection of Claims 11, 12, 23, and 24 Under 35 U.S.C. §103(a)

Claims 11, 12, 23, and 24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Beyda *et al.* (US 6,148,294) in view of Candan *et al.* (US 6,549,896). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Beyda *et al.* and Candan *et al.*, individually or in combination, do not teach or suggest each and every element set forth in the subject claims.

Candan *et al.* does not make up for the aforementioned deficiencies of Beyda *et al.* with respect to independent claims 1 and 13 (which claims 11, 12, 23, and 24 directly

or indirectly depend from). Candan *et al.* merely discloses a method for estimating an association between media objects and a seed web page accessed by a user. (*See* abstract). Therefore, the subject invention as recited in claims 11, 12, 23, and 24 is not obvious over the combination of Beyda *et al.* and Candan *et al.* Accordingly, withdrawal of this rejection is respectfully requested.

IV.   CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

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11